



## UNITED STATE DEPARTMENT OF COMMERCE Patent and Trademark Office

Address: COMMISSIONER OF PATENTS AND TRADEMARKS Washington, D.C. 20231

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR			ATTORNEY DOCKET NO.	
UU/CIZ, 90	9 03/04/	96	NUSSER		D	1231-12
L CHVDIES "	CALIZANO		F3M1/0502	乛	EXAMINER	
' CHARLES W PETREE ST(	OCKTON L.L. FOURTH STRE	P.			NGUYEN, A	
1001 WEST		TREET 7101			ART UNIT	PAPER NUMBER
MINOLON 2	ALEM NC 271				3307	7
					DATE MAILED	: 05/02/97

Please find below and/or attached an Office communication concerning this application or proceeding.

**Commissioner of Patents and Trademarks** 



## Office Action Summary

Application No. 08/612,969

Applicant(s)

Dennis W. Nusser

Examiner

**Anthony Nguyen** 

Group Art Unit 3307



X Responsive to communication(s) filed on Feb 24, 1997						
☑ This action is FINAL.						
☐ Since this application is in condition for allowance except for formal in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 1						
A shortened statutory period for response to this action is set to expire is longer, from the mailing date of this communication. Failure to responsibility application to become abandoned. (35 U.S.C. § 133). Extensions of time 37 CFR 1.136(a).	nd within the period for response will cause the					
Disposition of Claims						
	is/are pending in the application.					
Of the above, claim(s)	is/are withdrawn from consideration.					
Claim(s)	is/are allowed.					
	is/are rejected.					
Claim(s)						
Claims	are subject to restriction or election requirement.					
Application Papers						
☐ See the attached Notice of Draftsperson's Patent Drawing Review	r, PTO-948.					
☐ The drawing(s) filed on is/are objected to b	y the Examiner.					
☐ The proposed drawing correction, filed on is ☐ approved ☐ disapproved.						
☐ The specification is objected to by the Examiner.						
☐ The oath or declaration is objected to by the Examiner.						
Priority under 35 U.S.C. § 119						
Acknowledgement is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).						
☐ All ☐ Some* ☐ None of the CERTIFIED copies of the price	rity documents have been					
received.						
received in Application No. (Series Code/Serial Number)						
<ul> <li>received in this national stage application from the Internati</li> <li>*Certified copies not received:</li> </ul>	onal Bureau (PC1 Hule 17.2(a)).					
Acknowledgement is made of a claim for domestic priority under :	35 U.S.C. § 119(e).					
Attachment(s)						
☐ Information Disclosure Statement(s), PTO-1449, Paper No(s).						
☐ Interview Summary, PTO-413						
☐ Notice of Draftsperson's Patent Drawing Review, PTO-948						
☐ Notice of Informal Patent Application, PTO-152	·					
SEE OFFICE ACTION ON THE FOLLO	OWING PAGES					



Page 2

Serial Number: 08/612969

Art Unit: 3307

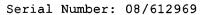
The following is a quotation of the first paragraph of 35 U.S.C. § 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

The specification is objected to under 35 U.S.C. § 112, first paragraph because there is no specific disclosure of the keyboard including the individual keys which are arranged in a "Dvorak" layout, nor is any such layout illustrated. Note also that no "Qwerty" keyboard is fully illustrated as is required by the presence of claim 24. See 37 CFR 1.83 (a) first sentence.

Claims 24 and 28 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification as now claimed. Additionally, no Dvorak or Qwerty layout is illustrated. All claimed subject matter must be illustrated.

Claims 1-28 are rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point



Art Unit: 3307

out and distinctly claim the subject matter which applicant regards as the invention.

With respect to claims 1 and 23, the last line, the keystroke travel range of "at least 0.9 millimeters" is indefinite because it includes a wide range from 0.9mm and up.

The following is a quotation of 35 U.S.C. § 103 which forms the basis for all obviousness rejections set forth in this Office action:

A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Subject matter developed by another person, which qualifies as prior art only under subsection (f) or (g) of section 102 of this title, shall not preclude patentability under this section where the subject matter and the claimed invention were, at the time the invention was made, owned by the same person or subject to an obligation of assignment to the same person.

Claims 1-28 are rejected under 35 U.S.C. § 103 as being unpatentable over Wang in view of each of the patents to Herzog et al. and klauber.

Wang teaches an input apparatus having substantially the structure as claimed except the keyboard utilizes a membrane for key layout. Note for example, in Figs.1 and 4a-4g, Wang teaches a keyboard having a plurality of keys which generate input



Serial Number: 08/612969

Art Unit: 3307

signals including a plurality of numerals and letters. The keys such as Shift, Control and Alter have a minimum center-to-center horizontal spacing in the range of 12-19 mm and a vertical spacing of 18-21 mm, and the spacing is obviously smaller for the alphanumeric keys. Note, that the widths and depths of the keys of a standard keyboard is about 12 mm which is also in the range as claimed. Both Herzog et al. and Klauber teach an input apparatus including a plurality of conventional keys for generating signals which are in English with Arabic numerals. In view of these teachings of Herzog et al. and Klauber, it would have been obvious to one of ordinary skill in the art to modify the keyboard of Wang by incorporating the keyboard teachings of Herzog et al. and Klauber for improve typing feel. With respect to claims 6,14,18,23 and 25, the functions to be used in the input apparatus as recited are well known in the art as exemplified by Wang and Herzog et al. With respect to claim 24, the keyboard including keys which are arranged in a "querty" layout is obvious in view of Wang, Herzog et al. and Klauber. See Fig.1 (each patent). With respect to claim 28, it would be obvious to use any known keyboard layout.



Serial Number: 08/612969

Art Unit: 3307

The non-statutory double patenting rejection, whether of the obviousness-type or non-obviousness-type, is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent. In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); In re Van Ornum, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); In re Longi, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); and In re Goodman, 29 USPQ2d 2010 (Fed. Cir. 1993).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(b) and (c) may be used to overcome an actual or provisional rejection based on a non-statutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.78(d).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-28 are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-8 of U.S. Patent No. 5,531,529. Although the conflicting claims are not identical, they are not patentably distinct from each other because the structure claimed in the present application differs from the structure claimed in the patent only by the alternative language used in the claims.

Serial Number: 08/612969

Art Unit: 3307

Applicants' arguments filed on January 24, 1997 have been fully considered but they are not persuasive of any error in the above rejection. Applicant argues that Wang does not teach the input apparatus as recited. However, as indicated above, the combination of Wang, Herzog et al. and Klauber renders obvious the structure as claimed. Also, the disclosure fails to comply with 35 USC 112, first and second paragraphs. Thus, it is believed that the rejections are proper. There is no apparent unobviousness in the structure claimed relative to the structure of the prior art as applied.

It is noted that the terminal disclaimer offered by applicant must be received <a href="BEFORE">BEFORE</a> a notice of allowance can be issued. Obviously all other must be overcome.

Applicant's amendment necessitated the new grounds of rejection. Accordingly, **THIS ACTION IS MADE FINAL**. See M.P.E.P. § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 C.F.R. § 1.136(a).

A SHORTENED STATUTORY PERIOD FOR RESPONSE TO THIS FINAL ACTION IS SET TO EXPIRE THREE MONTHS FROM THE DATE OF THIS ACTION. IN THE EVENT A FIRST RESPONSE IS FILED WITHIN TWO MONTHS OF THE MAILING DATE OF THIS FINAL ACTION AND THE ADVISORY ACTION IS NOT MAILED UNTIL AFTER THE END OF THE THREE-MONTH SHORTENED STATUTORY PERIOD, THEN THE SHORTENED STATUTORY PERIOD WILL EXPIRE ON THE DATE THE ADVISORY ACTION IS MAILED, AND ANY EXTENSION FEE

Page 7

Serial Number: 08/612969

Art Unit: 3307

PURSUANT TO 37 C.F.R. § 1.136(a) WILL BE CALCULATED FROM THE MAILING DATE OF THE ADVISORY ACTION. IN NO EVENT WILL THE STATUTORY PERIOD FOR RESPONSE EXPIRE LATER THAN SIX MONTHS FROM THE DATE OF THIS FINAL ACTION.

Any inquiry concerning this communication should be directed to Examiner Anthony Nguyen at telephone number (703) 308-2869.

ail.

AHN

April 29, 1997

EDGAR S. BURR S.P.E.

**GROUP ART UNIT 337**